



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/533,305

10/31/2005

Orson L. Bourne

17941-US-NP

5169

23553

7590

10/06/2009

MARKS & CLERK

P.O. BOX 957

STATION B

OTTAWA, ON K1P 5S7

CANADA

EXAMINER

SHAH, MANISH S

ART UNIT

PAPER NUMBER

2853

MAIL DATE

DELIVERY MODE

10/06/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/533,305	Applicant(s) BOURNE ET AL.	
	Examiner Manish S. Shah	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 42-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 42-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 42-59 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The depositing a first agent with emulsion, providing the second agent to the emulsion and providing a curing agent, and whereby the first agent forms solid within the emulsion upon the reaction, with the second agent, and where by the emulsion cured about the solids so as to inhibits spread of the emulsion is not described in the specification properly..

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 42-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arimatsu et al. (# US 5312654) in view of Waller, Jr. et al. (# US 6537650).

Arimatsu et al. discloses:

- A method of producing an image on a printing screen (printing plate) (see Abstract), comprising: depositing an emulsion (photopolymerizable ink; organic polymer) on the printing screen in an image-wise manner (see Abstract; Examples; column: 2, line: 20-67; column: 3, line: 1-67); depositing a first agent with the emulsion, the first agent being a chemical in liquid solution and that forms solids upon reaction with a second agent (column: 6, line: 1-30); providing the second agent to the deposited emulsion (column: 6, line: 15-67); and providing a curing agent to the emulsion (column: 7, line: 5-60), whereby the first agent forms solids within the emulsion upon reaction with the second agent, and whereby the emulsion cures about the solids so as to inhibit spread of the emulsion (column: 6, line: 15-30).
- The first agent is pre-mixed in solution with the emulsion such that depositing the first agent occurs as part of depositing the emulsion (see Examples).
- The second agent is a chemical in liquid solution, and wherein the method comprises the further step of depositing the second agent with the emulsion (column: 8, line: 10-40).
- The second agent is NaCO_3 (column: 8, line: 30-35).
- The emulsion is a diluted and filtered photopolymer (see Examples).
- The emulsion and the first agent are each provided in a separate well of an inkjet cartridge, and wherein the emulsion and the first agent are deposited simultaneously using an inkjet printer (see Examples; column: 8, line: 10-40).

- The emulsion and the first agent are deposited based on a computer-to-screen imaging system (see Examples).

- The curing agent is a chemical in liquid solution, wherein the curing agent is provided in a separate well of the inkjet cartridge, and wherein providing the curing agent to the emulsion comprises depositing the curing agent using the inkjet printer simultaneously to depositing the emulsion (see Examples; inkjet printer HG-800).

- The second agent is atmospheric oxygen, and whereby the first agent forms insoluble agents upon deposition of the emulsion on the printing screen (see Examples).

- The second agent is a chemical in liquid solution provided in a separate well of the inkjet cartridge, and wherein the method comprises the further step of depositing the second agent simultaneously with the emulsion (see Examples).

- The curing agent comprises photons emitted by a Light Emitting Diode (see Examples).

- The second agent is atmospheric oxygen (see Examples), and wherein the first agent is maintained in an oxygen deficient (oxygen free) environment until deposited with the emulsion (see Examples).

Arimatsu et al. differs from the claim of the present invention is that the first agent is FeSO_4 or CaCl_2 .

Waller, Jr. et al. teaches that to provide the high resolution image, and control the reception of pigment particle on the medium, composition having the metal salt, selecting from ferrous sulfate, zinc sulfate, calcium chloride (column: 6, line: 10-35).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the first agent of Arimatsu et al. by the aforementioned teaching of Waller, Jr. et al. in order to control the reception of pigment particle on the medium, which gives high resolution image.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(1) Simons (# US 2001/0000382) discloses an image is formed by coating of cross-linkable polymeric substance on the substrate (see Abstract).

(2) Simons et al. (# EP 0883026) discloses an image is formed by coating of cross-linkable polymeric substance on the coated substrate (see Abstract; page: 2, line: 25-45).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manish S. Shah whose telephone number is (571) 272-2152. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2853

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Manish S. Shah/
Primary Examiner
Art Unit 2853

/MSS/